



Docket No.: 21581-00298-US1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Koji Yonehara, et al.

Application No.: 10/621,399

Confirmation No.:

Filed: July 18, 2003

Art Unit: N/A

For: LIQUID PHASE OXYGENATION
REACTION USING TUNGSTEN SPECIES

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed within three months of the U.S. filing date (37 CFR 1.97(b)(1)).

A copy of each reference on PTO/SB/08 is attached.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this

Application No.: 10/621,399

Docket No.: 21581-00298-US1

application by this firm) to our Deposit Account No. 22-0185, under Order No. 21581-00298-

US1. A duplicate copy of this paper is enclosed.

Dated: October 20, 2003

Respectfully submitted,

By 

Burton A. Amernick

Registration No.: 24,852

CONNOLLY BOVE LODGE & HUTZ LLP

1990 M Street, N.W., Suite 800

Washington, DC 20036-3425

(202) 331-7111

(202) 293-6229 (Fax)

Attorney for Applicant



PTO/SB/21 (05-03)
Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | |
|--|------------------------|------------------|
| TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i> | Application Number | 10/621,399 |
| | Filing Date | July 18, 2003 |
| | First Named Inventor | Koji Yonehara |
| | Art Unit | N/A |
| | Examiner Name | Not Yet Assigned |
| Total Number of Pages in This Submission | Attorney Docket Number | 21581-00298-US1 |

| ENCLOSURES (check all that apply) | | |
|--|--|---|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): IDS by Applicant References |
| <div>Remarks</div> | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---|
| Firm or Individual name | CONNOLLY BOVE LODGE & HUTZ LLP Burton A. Amernick - 24,852 |
| Signature | |
| Date | October 20, 2003 |



PTO/SB/08a/b (06-03)

Approved for use through 07/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | | | |
|--|---|------------------|---|--------------------------|------------|
| Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Complete If Known | |
| | | | | Application Number | 10/621,399 |
| Filing Date | | July 18, 2003 | | | |
| First Named Inventor | | Koji Yonehara | | | |
| Art Unit | | N/A | | | |
| Examiner Name | | Not Yet Assigned | | | |
| Attorney Docket Number | | 21581-00298-US1 | | | |
| Sheet | 1 | of | 1 | | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|---|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number Number-Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | AA | US-2,870,171 | 01-20-1959 | Gable | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|---|--------------------------------|---|---|---|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| | BA | EP-0109273-A1 | 05-23-1984 | Venturello et al. | | |
| | BB | WO-93/00338 | 01-07-1993 | Brown et al. | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | | | | |
|---------------------------------|-----------------------|---|--|--|--|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | | | T ² |
| | CA | T. YAMAGUCHI, ET AL. "Isomerization and Disproportionation of Olefins over Tungsten Oxides Supported on Various Oxides", Journal of Catalysis 65, 442-447 (1980) | | | | |
| | CB | L. L. MURRELL, ET AL., "Supported Transition Metal Oxides as Acid Cracking Catalysts: Periodic Trends and Their Relationship to Activity an Selectivity", Journal of Catalysis 107, 463-470 (1987) | | | | |
| | CC | OSTROMECKI ET AL., " The Influence of metal oxide additives on the molecular structures of a surface tungsten oxide species on alumina: I. Ambient conditions", Journal of Molecular Catalysis A: Chemical 132 (1998) p. 43-57. | | | | |
| | CD | E. BRIOT ET AL., "Aqueous acidic hydrogen peroxide as an efficient medium for tungsten insertion into MCM-41 mesoporous molecular sieves with high metal dispersion", Journal of Materials Chemistry, 2000, 10, p.953-958. | | | | |
| | CE | T. SAKAMOTO ET AL., "Selective epoxidation of olefins by hydrogen peroxide in water using a polyoxometalate catalyst supported on chemically modified hydrophobic mesoporous silica gel", Tetrahedron Letters 41 (2000) p. 10009-10012 | | | | |
| | CF | Y. WATANABE ET AL., "Epoxidation of alkenes catalyzed by heteropolyoxometalate as pillars in layered double hydroxides", Journal of Molecular Catalysis A: Chemical 145 (1999) 281-289. | | | | |
| | CG | R. JIN ET AL., "Selective Oxidation of Cyclopentene to Glutaraldehyde by H ₂ O ₂ over the WO ₃ /SiO ₂ Catalyst, Journal of Catalysis 203, p. 75-81 (2001) | | | | |
| | CH | Z. ZHANG ET AL., "Synthesis, characterization, and catalytic testing of W-MCM-41 mesoporous molecular sieves", Applied Catalysis A: General 179 (1999) 11-19. | | | | |
| | CI | R. NEUMANN ET AL., "Metal Oxide (TiO ₂ , MoO ₃ , WO ₃) Substituted Silicate Xerogels as Catalysts for the Oxidation of Hydrocarbons with Hydrogen Peroxide", Journal of Catalysis 166, 206-217 (1997) Artical No. CA971479. | | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | |
|--------------------|--|-----------------|--|
| Examiner Signature | | Date Considered | |
|--------------------|--|-----------------|--|